#### **ROAD SAFETY AUDIT**

Route 18 at Route 139

Town of Abington

July 2011

Prepared for: Massachusetts Department of Transportation



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#### Background

The intersection of Bedford Street (Route 18) and Randolph Street/North Avenue (Route 139) in the Town of Abington, Massachusetts is listed as #24 according to the Massachusetts Department of Transportation's (MassDOT) 2006-2008 Statewide Top 200 Intersection Crash List. As such, the MassDOT conducted a Road Safety Audit (RSA) to identify the safety issues and potential safety enhancements.

Route 18 between Highland Avenue in Weymouth and Route 139 in Abington is currently in the preliminary design phase for a widening and reconstruction project (#601630), with construction anticipated to begin in Spring 2013. The RSA is intended to identify potential safety improvements that can either be evaluated and included as part of the current design process or considered as part of future reconstruction efforts at the intersection. The short-term, low-cost potential improvements could be considered by the responsible agency for implementation prior to reconstruction, as appropriate.

#### **Project Data**

The audit team conducted an RSA for the intersection of Route 18 and Route 139 on Thursday, July 14, 2011. The RSA agenda appears in **Appendix A. Table 1** lists the audit team members and their affiliations. **Appendix B** provides contact information for all team members.

Table 1. Participating Audit Team Members

Audit Team Member	Agency/Affiliation
Kenan Connell	Abington Highway Department
Jack Caine	Abington Highway Department
Bob O'Keefe	Abington Police Department
John Nuttall	Abington Fire Department
Bill McNulty	Old Colony Planning Council
Bruce Hughes	Old Colony Planning Council
Brian Ackley	TetraTech
J. Michael Garvin	TetraTech
John Romano	MassDOT Municipal Liaison
Donny Dailey	MassDOT Municipal Public Affairs
Edward Feeney	MassDOT District 5 Traffic
Alex Lovejoy	MassDOT District 5 Traffic
Barbara Lachance	MassDOT District 5 Traffic
Lisa Schletzbaum	MassDOT Highway Division Safety Section
Joe SanClemente	Howard/Stein-Hudson Associates

#### **Project Location Description and Crash Summary**

The intersection of Bedford Street (Route 18) and Randolph Street/North Avenue (Route 139) is located in the Town of Abington, as shown in the aerial image in **Figure 1**. The intersection is located approximately four miles south of Route 3 (Exit 16). Commercial uses are located on all four corner of the intersection and the Abington Fire Department is located approximately 900 feet north of the intersection on Route 18.

Route 18 at Route 139 is a four-way signalized intersection. The Bedford Street (Route 18) eastbound approach consists of one shared left-turn/through lane, one through lane, and one dedicated right-turn lane. The North Avenue (Route 139) westbound approach consists of one shared left-turn/through lane and one shared through/right-turn lane. Wales Street intersects North Avenue from the northeast at an acute angle approximately 100 feet east of Route 18; Wales Street operates under yield control. The Bedford Street (Route 18) northbound and southbound approaches each consist of an exclusive left-turn lane, one through lane, and one shared through/right turn lane.

The intersection forms the junction of the following roadways, which are categorized according to MassDOT Office of Transportation Planning functional classifications:

**Bedford Street (Route 18)** is an urban principal arterial and falls under MassDOT jurisdiction. Bedford Street is a north–south roadway and is dedicated as Route 18. Within the vicinity of the intersection, Route 18 generally consists of one travel lane in each direction. The speed limit along Route 18 is 35 miles per hour (mph) per the speed regulations.

**Randolph Street (Route 139)** is an urban principal arterial and falls under Town jurisdiction. Randolph Street is an east—west roadway. Within the vicinity of the intersection, Randolph Street consists of one travel lane in each direction. The speed limit along Randolph Street is 30 mph per the speed regulations.

*North Avenue (Route 139)* is an urban minor arterial and falls under Town jurisdiction. North Avenue an east—west roadway. Within the vicinity of the intersection, North Avenue consists of one travel lane in each direction. The speed limit along North Avenue is 30 mph per the speed regulations.

*Wales Street* is a local roadway and falls under Town jurisdiction. Wales Street is an east—west roadway. Within the study area, Wales Street consists of 1 travel lane in each direction.

Prior to the RSA, in order to begin assessing possible safety issues, the team reviewed collision diagrams and a crash detail summary based on crash records supplied by the Abington Police Department and the Registry of Motor Vehicles. From January 2008 through December 2010, 79 crashes were reported at the intersection. Of the 79 crashes, a majority were angle type crashes (39 or approximately 49%), rear-end (20 or approximately 26%), and sideswipe same direction crashes (6 or approximately 8%). Crashes generally occurred on dry pavement (48, or nearly 61%) in clear weather conditions (41, or nearly 52%) and under good lighting conditions (daylight or lighted roadway) (65 or 82%). Approximately 24% of the crashes (or 19) occurred on wet or snow covered pavement. **Appendix C** provides the detailed crash data for the intersection. Speed regulations and traffic volume data are presented in **Appendix D**.

#### Figure 1. Locus Map



# Road Safety Audit Observations and Potential Enhancements

Based on field observations on Thursday, July 14, 2011, the RSA team determined that the intersection of Route 18 at Route 139 has the following issues that affect safety:

- Traffic signal indications, phasing, and clearance intervals;
- Access management;
- Pavement markings;
- Signage;
- Utility pole placement; and
- Limited pedestrian accessibility.

The following sections describe in more detail the safety issues and enhancements determined during the RSA. Several of these issues require further study and engineering judgment to determine the feasibility of implementing enhancements to address them.

# Safety Issue #1. Traffic Signal Indications, Phasing, and Clearance Intervals

#### Observations:

The Route 139 eastbound and westbound approaches currently allow for permissive left turns only; protected left turns are not provided. RSA team members commented that it can be difficult for motorists to find an acceptable gap in the passing traffic stream to make a left-turn and noted that motorists do not have a dedicated left-turn lane.

According to the crash records, 12 of the crashes (or approximately 15%) involved motorists that failed to stop at the red light. Of



Left-turns from Route 139 eastbound.

these 12 crashes, 10 (or 83%) involved vehicles traveling along either the Route 139 eastbound or westbound approach. During field observations, the RSA team noted that vehicles making left-turns at the Route 139 eastbound and westbound approaches often queue in the middle of the intersection while waiting to find an acceptable gap in the passing traffic stream. Many of these

left-turning vehicles were observed traveling through the intersection during the red phase, which may have contributed to the crash experience at the intersection.

According to traffic volume data collected by MassDOT at the intersection during April 2011, left-turns at the Route 139 eastbound approach reach between approximately 100 and 120 vehicles per hour during the morning and evening peak periods—slightly above the 100 left-turns per hour minimum requirement for an exclusive left-turn lane per the *MassDOT 2006 Project Development & Design Guide*. Meanwhile, left turns at the Route 139 westbound approach are generally below the 100 left-turns per hour threshold during the peak periods.

Lastly, the RSA team also noted that some of the light emitting diodes (LED's) are not working on several of the traffic signal indications making them less visible.

#### **Enhancements:**

- 1. Evaluate clearance intervals at all of the intersection approaches per Institute of Transportation Engineers (ITE) standards (short-term).
- 2. Consider the appropriateness of providing an advance left turn phase, and associated signal equipment upgrades, for the Route 139 eastbound approach to allow for a protected left-turn in addition to the permissive left-turn (short-term).
- 3. Review the safety and operational benefits/impacts of adding an exclusive left-turn lane for the Route 139 eastbound approach.
- 4. Maintain LED traffic signal indications to ensure visibility.

#### Safety Issue #2. Access Management

#### Observations:

The intersection of Route 18 at Route 139 currently has commercial uses located on each of the four corners of the intersection resulting in numerous curb cuts in the vicinity of the intersection. Of the 79 crashes reported at the intersection, 32 crashes (or nearly 41%) occurred at commercial driveways adjacent to the intersection. The RSA team noted the following with respect to access management at the Mobil and Sunoco gas station driveways:

#### **Mobil Gas Station**

The largest concentration of the crashes at the commercial driveways occurred at the intersection of the Mobil gas station driveway and Randolph Street (Route 139) with nine crashes reported between January 2008 and December 2010. Of these nine crashes, seven were angle type crashes involving eastbound through traffic and vehicles making left-turns out of the Mobil driveway onto Route 139.

Route 139 eastbound consists of one travel lane to the west of the intersection and widens to three lanes in the vicinity of the Mobil driveway



Wide cross-section on Route 139 adjacent to Mobil.

to allow for one shared left-turn/through lane, one through lane, and an exclusive right-turn lane at the intersection with Route 18. Thus, motorists making the left turn out of the Mobil driveway onto Route 139 need to cross three travel lanes. According to RSA team members, a motorist traveling along Route 139 eastbound may stop to allow a vehicle to make the left-turn out of the Mobil driveway; however, a second or third vehicle traveling in one of the other eastbound lanes may not expect, or be able to perceive and react to, a left-turning vehicle exiting left from the driveway. Likewise, a motorist making a left-turn out of the Mobil driveway onto Route 139 may not be able to see vehicles traveling in all three of the eastbound lanes if a first vehicle stops to allow them to make the turn.

#### Sunoco Gas Station



Sunoco Driveway on Route 18

The Sunoco gas station, located on the southeast corner of the intersection, is constructed at a slightly higher elevation than Route 18 resulting in a fairly steep vertical grade change at the driveway accessing the site. The RSA team noted that the grade change at the driveways result in vehicles entering the gas station at a slower rate of speed in an effort to avoid scraping the bottom of their vehicle. Motorists, unfamiliar with the location, may not expect the need to slow down at the

driveway apron when trying to judge an adequate gap in the Route 18 northbound traffic stream (three lanes) to safely make a left-turn.

#### **Enhancements:**

- 1. The audit team was in agreement that this location warrants serious consideration of restricting left-turns from the Mobil Driveway onto Randolph Street (Route 139).
- 2. Consider the safety benefits of restricting Route 18 southbound left-turns into the Sunoco Driveway if crash experience worsens/continues. Also consider any resulting impacts on heavy vehicle access (e.g., fuel deliveries).

#### Safety Issue #3. Pavement Markings and Signage

#### Observations:

During field observations the RSA team noted that there is a crest vertical curve in the alignment of Route 18 just north of the intersection in the vicinity of where the roadway widens from one to three travel lanes in the southbound direction to allow for a turning lane and an additional turning lane at the intersection. As a result, the vertical curve reduces the visibility of the southbound vehicles queued for a red light.

An RSA team member also noted that the lane lines do not extend past the vertical curve. Thus, motorists unfamiliar with the intersection may not



Crest vertical curve limits sight lines of Route 18 southbound approach and lane designations.

anticipate the need to change lanes, or that they are arriving at an intersection approach until they have already arrived. According to the crash records, there were eight rear-end crashes and four sideswipe (same direction) crashes reported involving vehicles at the Route 18 southbound approach. Unclear lane use designations may have contributed to these crashes. However, during field observations an RSA team member did note that a mandatory movement lane control sign indicating "Left Lane Must Turn Left" (R3-7) was posted. After the audit, a review of the original design plan shows a dotted white lane line (DWLL) proposed to delineate the left-turn only lane.

Lastly, each of the intersection departures has two receiving lanes that taper to one travel lane. The RSA team noted that the pavement markings in each of the merge areas are either worn or missing. In addition, no supplemental signage is provided warning motorists of the merge such as Lane Ends symbol signage (W4-2) and/or Right Lane Ends (W9-1) or Lane Ends Merge Left (W9-2).

#### **Enhancements:**

- 1. Add a DWLL, as originally designed, to provide delineation of the Route 18 southbound left-turn lane.
- 2. Evaluate the feasibility of installing an Advance Intersection Lane Control (R3-8) sign along Route18 southbound to provide additional lane use information.
- 3. Evaluate the appropriateness/feasibility of installing broken white lane line pavement markings at each of the receiving lanes to delineate the two travel lanes.
- 4. Consider the appropriateness of installing warning signage (e.g., Lane Ends symbol signage (W4-2) and/or Right Lane Ends (W9-1) or Lane Ends Merge Left (W9-2)) at each of the receiving lanes to warn drivers of the lane reduction.

#### Safety Issue #4. Utility Pole Placement

#### Observations:

The RSA team noted that the utility poles located on the northeast, northwest, and southeast corners of the intersection are positioned close to the curbline. According to the crash records, there was one crash reported involving a motorist that hit the utility located on the southeast corner of the intersection.

During field observations, the RSA team also noted that the wiring on the utility poles (across the intersection) partially inhibits the view of the signal indications in the Route 18 northbound and southbound direction.



Utility pole located close to the edge of the roadway on the southeast corner of the intersection.

Finally, the team noted that the presence of a utility pole and a traffic signal foundation on the northwest corner of the intersection significantly reduces the effective width of the sidewalk.

#### **Enhancements:**

1. Relocate utility poles at intersection further away from the edge of the roadway if there is space within the right-of-way and where feasible. Consider the placement of the utility lines and poles with respect to the visibility of the traffic signal indications and the impact on the effective width of the sidewalk.

#### Safety Issue #5. Other General Observations

#### Observations:

The RSA team also noted the following general observations with respect to overgrown vegetation and curb ramps:

<u>Overgrown Vegetation</u> – the RSA team noted that the visibility of the following signage was obstructed by overgrown vegetation:

- Route 18 guide signage along North Avenue (Route 139)/Wales Street westbound;
- Route 18 guide signage along Randolph Street (Route 139) eastbound; and
- Route 139 guide signage along Route 18 southbound.



Overgrown vegetation obstructs view of guide signage at along the North Ave./Wales St. westbound approaches.

<u>Curb Ramps</u> – an RSA team member noted that the curb ramps at the intersection do not have truncated dome tactile detectable warning surfaces.

#### **Enhancements:**

- 1. Maintain vegetation to improve visibility of guide signage along all approaches to the intersection.
- 2. In stall truncated dome tactile detectable warning surfaces at all curb ramps per the *MassDOT 2006 Project Development & Design Guide*.

#### Recommendations

Based on its observations and discussions, the RSA team identified the issues and possible enhancements that could improve safety at the intersection of Bedford Street (Route 18) and Randolph Street/North Avenue (Route 139) in the Town of Abington, Massachusetts. Further design work or consideration may be necessary to determine the feasibility of making some of the improvements.

#### Short-term enhancements include:

- Evaluate and adjust clearance intervals as appropriate;
- Add protected left-turn phasing;
- Improve access management by adding turn restrictions;
- Extend and improve lane markings;
- Improve signing;
- Replace LEDs on traffic signal indication; and
- Trim vegetation overgrowth.

To enhance the safety of the intersection, the *long-term enhancements* are to:

- Widen the Route 139 eastbound approach for an exclusive left-turn lane; and
- Relocate utility poles.

**Table 2** summarizes these safety issues, possible enhancements, estimated safety payoff, time frame, cost, and responsibility. Safety payoff estimates are based on engineering judgment and are categorized as low, medium, and high. The time frame is categorized as short-term (<1 year), midterm (1 to 3 years), or long-term (typically >3 years). Long-term improvements are typically considered to be substantial improvements with an expected time frame for implementation greater than 3 years. The costs are categorized as low (<\$10,000), medium (\$10,001 to \$50,000), or high (>\$50,000).

The RSA is intended to identify potential safety improvements that can either be evaluated and included as part of the current design process for the Route 18 widening project or considered as part of future reconstruction efforts at the intersection. The short-term, low-cost potential improvements could be considered by the responsible agency for implementation prior to reconstruction, as appropriate.

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Road Safety Audit Route 18 at Route 139, Abington Prepared by Howard/Stein-Hudson Associates, Inc. Table 2. Summary of Potential Safety Enhancements

Safety Issue	Safety Enhancement	Safety Payoff	Time Frame	Cost	Responsible Party
	Evaluate clearance intervals at all of the intersection approaches per Institute of Transportation Engineers (ITE) standards (short-term).	High	Short-term	Low	MassDOT
Traffic Signal Indications, Phasing, and Clearance	Consider the appropriateness of providing an advance left turn phase, and associated signal equipment upgrades, for the Route 139 eastbound approach to allow for a protected left-turn in addition to the permissive left-turn (short-term).	High	Short-term	Medium	Town of Abington/MassDOT
Intervals	Review the safety and operational benefits/impacts of adding an exclusive left-turn lane for the Route 139 eastbound approach.	Medium	Long-term	High	MassDOT
	Maintain LED traffic signal indications to ensure visibility.	Low	Short-term	Low	MassDOT
00000	The audit team was in agreement that this location warrants serious consideration of restricting left-turns from the Mobil Driveway onto Randolph Street (Route 139).	High	Short-term	Low	Town of Abington/MassDOT
Management	Consider the safety benefits of restricting Route 18 southbound left-turns into the Sunoco Driveway if crash experience worsens/continues. Also consider any resulting impacts on heavy vehicle access (e.g., fuel deliveries).	Low	Short-term	Low	Town of Abington/MassDOT
	Add a DWLL, as originally designed, to provide delineation of the Route 18 southbound left-turn lane.	Low	Short-term	Low	MassDOT
Pavement	Evaluate the feasibility of installing an Advance Intersection Lane Control (R3-8) sign along Route18 southbound to provide additional lane use information.	Low	Short-term	Low	MassDOT
Markings and Signage	Evaluate the appropriateness/feasibility of installing broken white lane line pavement markings at each of the receiving lanes to delineate the two travel lanes.	Low	Short-term	Low	MassDOT
	Consider the appropriateness of installing warning signage (e.g., Lane Ends symbol signage (W4-2) and/or Right Lane Ends (W9-1) or Lane Ends Merge Left (W9-2)) at each of the receiving lanes to warn drivers of the lane reduction.	Low	Short-term	Low	MassDOT

Road Safety Audit Route 18 at Route 139, Abington Prepared by Howard/Stein-Hudson Associates, Inc.

Table 2. Summary of Potential Safety Enhancements (continued)

		Cafety			
Safety Issue	Safety Enhancement	Payoff	Time Frame	Cost	Responsible Party
Utility Pole Placement	Relocate utility poles at intersection further away from the edge of the roadway if there is space within the right-of-way and where feasible. Consider the placement of the utility lines and poles with respect to the visibility of the traffic signal indications and the impact on the effective width of the sidewalk.	Low	Long-term	High	Town of Abington/ MassDOT
200	Maintain vegetation to improve visibility of guide signage along all approaches to the intersection.	Low	Short-term	Low	Town of Abington/ MasDOT
Observations	Install truncated dome tactile detectable warning surfaces at all curb ramps per the MassDOT 2006 Project Development & Design Guide.	Low	Short-term	Low	MassDOT

# Appendix A. RSA Meeting Agenda



#### **Road Safety Audit**

Abington – Bedford St (Rt 18) and Randolph St (Rt 139)

Meeting Location: Abington Police Dept.

215 Central Street, Abington

Thursday, July 14, 2011

10:00 AM – 12:00 PM

Type of meeting:

**Road Safety Audit** 

Attendees:

Invited Participants to Comprise a Multidisciplinary Team

Please bring:

Thoughts and Enthusiasm!!

10:00 AM

**Welcome and Introductions** 

10:15 AM

**Review of Site Specific Material** 

- Crash & Volume Summaries and speed regulations
- . Existing Geometries and Conditions

10:45 AM

Visit the Site

- Drive to the intersection of Bedford Street (Rt 18) and Randolph Street/North Avenue (Rt 139)
- As a group, identify areas for improvement

11:30 AM

#### **Completion of RSA**

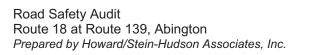
- Finalize discussion on all areas for improvement
- Discuss potential improvements with pros and cons and record possible countermeasures

12:00 PM

Adjourn for the Day – but the RSA has not ended

#### **Instructions for Participants:**

- Before attending the RSA on July 14th, participants are encouraged to drive / walk through the intersection and complete/consider elements on the RSA Prompt List with a focus on safety.
- All participants will be actively involved in the process throughout. Participants
  are encouraged to come with thoughts and ideas, but are reminded that the
  synergy that develops and respect for others' opinions are key elements to the
  success of the overall RSA process.
- After the RSA meeting, participants will be asked to comment and respond to the document materials to assure it is reflective of the RSA completed by the multidisciplinary team.



Appendix B.	RSA A	Audit <sup>-</sup>	Team	Contact	List
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Road Safety Audit Route 18 at Route 139, Abington Prepared by Howard/Stein-Hudson Associates, Inc.

# Participating Audit Team Members Location: Abington Police Department, 215 Central Street, Abington, MA

Audit Team Members         Agency/Affiliation         E-mail Address           Kenan Connell         Abington         Abington           Jack Caine         Abington Highway         JCaine@abingtonma.gov           Bob O'Keefe         Abington Police Department         bokeefe@abingtonpolice.org           John Nuttall         Abington Police Department         bokeefe@abingtonma.gov           Bill McNulty         Old Colony Planning Council         wmcnulty@ocpcrpa.org           Brian Ackley         TetraTech         bhughes@ocpcrpa.org           Brian Ackley         TetraTech         Brian.ackley@eteratech.com           J. Michael Garvin         TetraTech         MassDOT Municipal Liaison           John Romano         MassDOT Municipal Liaison         John.comano@state.ma.us           Bonny Dailey         MassDOT Municipal Public Affairs         Donny.Dailey@state.ma.us           Alex Lovejoy         MassDOT District 5 Traffic         Edward.feeney@state.ma.us           Barbara Lachance         MassDOT District 5 Traffic         barbara.lachance@state.ma.us           Lisa Schletzbaum         MassDOT Highway Division Safety Section         lisa.schletzbaum@state.ma.us           Joe SanClemente         Howard/Stein-Hudson Associates         lis@hsbassoc.com	Date: Thursday	Thursday, July 14, 2011 Location:	r: Abington P	Abington Police Department, 215 Central Street, Abington, MA	Abington, MA
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MassDOT Municipal Public Affairs       'Donny.Dailey@state.ma.us'         MassDOT District 5 Traffic       Edward.feeney@state.ma.us         MassDOT District 5 Traffic       Alex.lovejoy@state.ma.us         MassDOT District 5 Traffic       barbara.lachance@state.ma.us         MassDOT Highway Division Safety Section       lisa.schletzbaum@state.ma.us         Howard/Stein-Hudson Associates       is@hshassoc.com	John Romano	MassDOT Municipal Liaison		John.romano@state.ma.us	(617) 973-7028
MassDOT District 5 Traffic       Edward.feeney@state.ma.us         MassDOT District 5 Traffic       Alex.lovejoy@state.ma.us         MassDOT District 5 Traffic       barbara.lachance@state.ma.us         MassDOT Highway Division Safety Section       lisa.schletzbaum@state.ma.us         Howard/Stein-Hudson Associates       is@hshassoc.com	Donny Dailey	MassDOT Municipal Public Affairs		'Donny.Dailey@state.ma.us'	(617) 945-4525
MassDOT District 5 Traffic barbara.lovejoy@state.ma.us  MassDOT District 5 Traffic barbara.lachance@state.ma.us  MassDOT Highway Division Safety Section lisa.schletzbaum@state.ma.us  Howard/Stein-Hudson Associates is@hshassoc.com	<b>Edward Feeney</b>	MassDOT District 5 Traffic		Edward.feeney@state.ma.us	(508) 884-4242
MassDOT District 5 Traffic barbara.lachance@state.ma.us MassDOT Highway Division Safety Section lisa.schletzbaum@state.ma.us Howard/Stein-Hudson Associates is@hshassoc.com	Alex Lovejoy	MassDOT District 5 Traffic		Alex.lovejoy@state.ma.us	(774) 219-4914
MassDOT Highway Division Safety Section lisa.schletzbaum@state.ma.us Howard/Stein-Hudson Associates is@hshassoc.com	Barbara Lachance	MassDOT District 5 Traffic		barbara.lachance@state.ma.us	(508) 884-4260
Howard/Stein-Hudson Associates   js@hshassoc.com	Lisa Schletzbaum	MassDOT Highway Division Safety	/ Section	lisa.schletzbaum@state.ma.us	(617) 973-7685
	Joe SanClemente	Howard/Stein-Hudson Associates		js@hshassoc.com	(617) 348-3334

Road Safety Audit Route 18 at Route 139, Abington Prepared by Howard/Stein-Hudson Associates, Inc.

# Appendix C. Detailed Crash Data



### COLLISION DIAGRAM

CITY/TOWN : Abington		DATE PREPARED	06 / 01 / 201
REGION:	ОСРС	PREPARED BY:	J.P.Y
ROADWAY NAMES:	Bedford St. (Rt 18) ar	nd Randolph St/North Ave (Rt 139)	(INTERSECTION)
TIME PERIOD ANALYZED:	01 / 06 / 2008 to	0 12 / 28 / 2010	
SOURCE OF CRASH REPO	ORTS: Abington	Police Department and R.M.V.	
North	9 36 Bedford 9 69 63	5t. (Rt. 18) Dunkin Donuts	
Crown Auto Sales  Saudolph St. (Rt 139)  27  268  Mobil Gas Station	16 10,15,20 55 37 37 31 43 43 31 73 29 65 21 354 39 7159 49	18 67 28 39 8 76 33 Sunoco Gas S	Wales St 22 45 North Ave (Rt 139)
SYMB	Bedford St. (	(Rt 18) 141 TYPES OF CRASH	
	Moving Vehicle	Head On	
	Backing Vehicle Non-Involved Vehicle	Angle	
<b>→</b> 2₹	Pedestrian	Turning Mov	/0
	Parked Vehicle Fixed Object	Rear End	
	Injury Accident Fatal Accident	Sideswipe	 
₹	Bicycle	Out of Contr	rol



#### **COLLISION DIAGRAM**

CITY/TOWN: Abington	DATE PREPARED: 06 / 01 / 2011
REGION: OCPC	PREPARED BY: J.P.Y
ROADWAY NAMES: Bedford St. (Rt 18) and	d Randolph St/North Ave (Rt 139)(ENTRANCE/EXIT)
TIME PERIOD ANALYZED: 01 / 06 / 200	18 to 12 / 28 / 2010
SOURCE OF CRASH REPORTS: Abir	ngton Police Department and R.M.V.
North  Crown Auto Sales	Ounkin Donuts  47  Dunkin Donuts  4 Subway  Wales St
©57 79  957 79  66  7 11 14 52 56 77 78  Mobil Gas Station  42 64	1 13 23 75 North Ave (Rt 139)  Sunoco Gas Station  58
Bedford St.	'   25
SYMBOLS	TYPES OF CRASH
Moving Vehicle  Backing Vehicle  Non-Involved Vehicle	Angle
Pedestrian	Turning Move
Parked Vehicle Fixed Object	Rear End
Injury Accident  Fatal Accident	Sideswipe
Bicycle	Out of Control

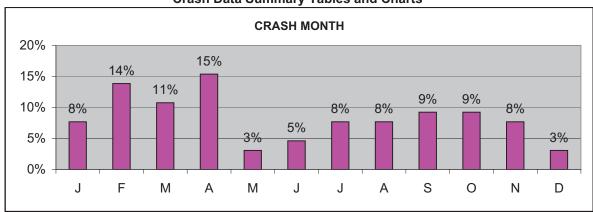
# Crash Data Summary Table Intersection of Rt 18 and Rt 139; Abington, MA January 2008- December 2010

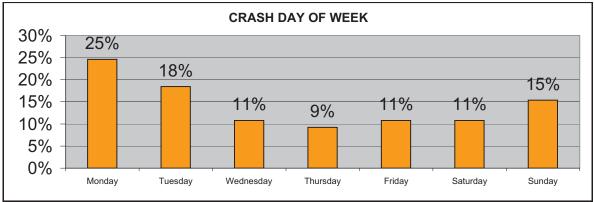
	Comments			light		r.					ane.		light			lane Sideswiping right lane	Operator stopped short & refused to follow an unidentified vehicle that disregarded the red light		light	d St.)	Failure to use care when changing lanes, Right lane sideswiping										light	trol vehicle		Dump truck w/ trailer took too wide of turn into telephone pole		Stop short after uninvloved vehicle exited Dunkin Donuts									section	section
		Exiting Dunkin Donuts	Slippery surface	Vehicle failed to stop at red light	Entering Dunkin Donuts	Entering Sunoco Gas Station	0		Failed to vield right of way	Entering Mobil Gas Station	Left lane sideswiping right lane	000000000000000000000000000000000000000	Vehicle failed to stop at red light	Exiting Dunkin Donuts	Exiting Mobil Gas Station	N.H. plate, hit and run, Left lane Sideswiping right lane	Operator stopped short & refused to vehicle that disregarded the red light		Vehicle failed to stop at red light	Exiting Sunoco (907 Bedford St.)	Failure to use care when challeft lane	ielcialie				Entering Dunkin Donuts	Exiting Sunoco	Exiting Mobil, hit and run	Hit and run		54 Vehicle failed to stop at red light	Wet road caused out of control vehicle	Entering Mobil Gas Station	Dump truck w/ trailer took to	Exiting Sunoco Gas Station	Stop short after uninvloved v	23 Vehicles slid on wet road		Exiting Dunkin Donuts				43	:3 Hit and run		
V	ວາ	- 1	65 20		35 27		43 35			┸	1				32 17	23 unk	35 29		80 23		13 13						_		25 unk		70 43 5		23 28	20	45 21	24 51	26			17 54		25 52	52 46	52 46 55	52 46 55	52 46 55 49
	Driver Contributing Code	No Improper Driving	No Improper Driving	Disregarded traffic signs, signals, road markings	Inattention	Unknown	Followed too closely	Failed to vield to right of way	No Improper Driving	Failure to keep in proper lane or running off road	Made an improper furn	Failed to vield to right of way	Inattention	Unknown	No Improper Driving	No Improper Driving	Inattention	Unknown	Inattention	Unknown	No Improper Driving	Foliad to violate to right of way	Na least of yield to right of way	Industrial de la company de la	Falled to yield to right of way	Failure to keep in proper lane or running off road	Failed to yield to right of way	No Improper Driving	No Improper Driving	Unknown	Failed to yield to right of way	Driving too fast for conditions	Failed to yield to right of way	Made an improper turn	Failed to yield to right of way	No Improper Driving	Followed too closely	Inattention	Unknown	Failed to yield to right of way		No Improper Driving	No Improper Driving Followed too closely	No Improper Driving Followed too closely No Improper Driving	No Improper Driving Followed too closely No Improper Driving Unknown	No Improper Driving Followed too closely No Improper Driving Whatman Discognified traffic signs signals road marking
Dood Surface	Road Surface	Dry	Snow	Dry	Water (standing,	Unknown	Drv	Drv	Drv	Dry	Dr.	Wet	Drv	Unknown	Dry	Dry	Wet	Unknown	Dry	Unknown	200	Wot	Wel	wel	Ury	Wet	Dry	Wet	Dry	Unknown	Wet	Wet	Dry	Dry	Dry	Dry	Wet	Wet	Unknown	Dry		Dry	Dry	Dry Wet Dry	Dry Wet Dry Unknown	Dry Wet Dry Unknown
Weather	Condition	Cloudy	Snow	Clear	ci ci	Unknown	Clear	Clear	Clear	Clear	Clear	Rain	Clear	Unknown	Clear	Clear	Rain	Unknown	Cloudy	Unknown	تومار	Clear	Cloudy	I S	Cloudy	Rain	Clear	Cloudy	Clear	Unknown	Rain	Rain	Clear	Clear	Clear	Clear	Rain	Rain	Unknown	Clear		Clear	Clear	Clear Clear Clear	Clear Clear Clear Unknown	Clear Clear Unknown
a distance of start i	Light Condition	Daylight	Daylight	Daylight	vewbear better - Area	Unknown	Davlight	Daylight	Daylight	Daylight	Davlight	Dusk	Daylight	Unknown	Daylight	Dark - lighted roadway	Daylight	Unknown	Daylight	Unknown	td: j/co/	Daylight	Daylight	Dayiigili	Daylight	Dark - lighted roadway	Daylight	Daylight	Daylight	Unknown	Dark - lighted roadway	Dusk	Dark - lighted roadway	Daylight	Daylight	Daylight	Daylight	Dark - lighted roadway	Unknown	Dark - lighted roadway		Dark - lighted roadway	Dark - lighted roadway  Dark - lighted roadway	Dark - lighted roadway  Dark - lighted roadway  Dark - lighted roadway	Dark - lighted roadway Dark - lighted roadway Dark - lighted roadway Unknown	Dark - lighted roadway Dark - lighted roadway Dark - lighted roadway Unknown
Merchanic Management	Manner of Comston	Angle	8:40 AM Rear-end	Angle	Rearrand Manager	Unknown	8:33 AM Rear-end	Angle	6:34 PM Sideswipe, same direction	Angle	8-27 PM Sideswipe, same direction	Angle	Angle	Unknown	Angle	Rear-end	4:10 PM Rear-end	Unknown	Angle	Unknown	0.54 DM Sideswine same direction	Sideswipe, same direction	Angle	Angle	Angle	10:30 PM Sideswipe, same direction	Angle	Angle	7:03 PM Rear-end	Unknown	7:27 PM Rear-end	4:53 PM Sideswipe, opposite direction	Angle	9:38 AM Single Vehicle Crash	Angle	7:25 AM Rear-end	2:52 PM Rear-end	5:51 PM Rear-end	Unknown	Angle		Sideswipe, same direction	5:01 PM Sideswipe, same direction 6:51 PM Rear-end	as l	ത്	σ I
	ите от рау	12:12 PM Angle	8:40 AM	11:14 AM Angle	6.50 PM		8:33 AM	8:07 AM Angle	6:34 PM	4:09 PM Angle	8-27 PM	5:26 PM Angle	7:44 AM Angle		1:45 PM Angle	12:00 AM Rear-end	4:10 PM		2:32 PM Angle		0.54 DM	8.05 AM Anglo	6.16 DM Angle	0. 10 PM	1:12 PM Angle	10:30 PM	11:38 AM Angle	7:25 AM Angle	7:03 PM		7:27 PM	4:53 PM	6:25 PM Angle	9:38 AM	10:20 AM Angle	7:25 AM	2:52 PM	5:51 PM		7:58 PM Angle		5:01 PM	5:01 PM 6:51 PM	5:01 PM 6:51 PM 8:46 PM	5:01 PM Sideswipe 6:51 PM Rear-end 8:46 PM Angle Unknown	5:01 PM Sideswip 6:51 PM Rear-end 8:46 PM Angle Unknown
1	crasn Day		8 Monday	8 Saturday	ж 2		2				Ϋ́				8 Sunday	0)		8 Wednesday	8 Sunday	-			$\perp$								8 Tuesday	8 Thursday	È	8 Friday	_	We		ľ					Wed	Š	Wed S.	Wed Si
d demo	Crasn Date			1/19/08	2/1/08		2				0.				4/20/08		4/29/08	2/28/08	80/8/9	2/3/08							ω				10/21/08	10/23/08	10/23/08	10/31/08	11/4/08				11/30/08	12/12/08	l	12/17/08				
7	#		2	n	4	. 5	9	7	80	0	10	7	12	13	14	15	16	17	18	19	5	27	7 6	7 8	3	24	25	26	27	28	30	31	32	33	34	35	36	37	38	39		40	4 4	4 4 4	40 41 42 43	44 43 43 44 43

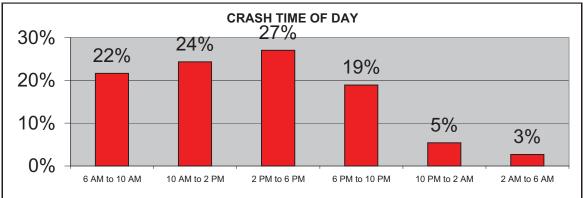
			Π	П								П		Π											П		П		П					П	
Comments		Both vehicles exiting Dunkin Donuts		Failed to stop at red light				Hit and run	33 Failed to stop at red light	Failure to merge, left lane sideswiping right lane	Exiting Mobil Gas Station	52 Entering Mobil Gas Station		Failed to stop at red light			Hit and run		62 Defective Brakes	Exiting Mobil Gas Station	Both drivers claim to have green light		Failed to stop at red light	Driver took eyes off road		Vehicle exited Dunkin Donuts at a high rate of speed	Failed to stop at red light						Exiting Mobil Gas Station		Exiting Mobil Gas Station
	39	38	20	54	28	52	18		19 33	2	29			46	43		49	34		37	33	65	38	37	38 87		29	22	38		18		09	24	
Ages	61 3	22 3	29 2	29 5	45 2	31 5	19 1	28	27 1	27 2	46 2	21 2		41 4	58 4		23 4	40 3	44 2		22 3	54 6		32 3	55 3		61 2	20 2	41 3		59 1		22 6	32 2	
	9	7	7	2	7	(1)		2		. 7	4	2		7	4)		7	7	7	4)	7	47	(-,	(-)	47		9	7	7		6		,	(,)	
Driver Contributing Code	Failed to yield to right of way	Failed to yield to right of way	Made an improper turn	Disregarded traffic signs, signals, road markings	Followed too closely	Inattention	Unknown	Unknown	Disregarded traffic signs, signals, road markings	Unknown	Failed to yield to right of way	Failed to yield to right of way	Unknown	Disregarded traffic signs, signals, road markings	Unknown	Operating Vehicle in erratic, reckless, careless,	negligent, or aggressive manner	Failure to keep in proper lane or running off road	Operating defective equiptment	Failed to yield to right of way	Unknown	Inattention	Disregarded traffic signs, signals, road markings	Followed too closely	Followed too closely	Unknown	Disregarded traffic signs, signals, road markings	Inattention	No Improper Driving	Unknown	Failed to yield to right of way	Unknown	Failed to yield to right of way	Failed to yield to right of way	Failed to yield to right of way
Road Surface	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Wet	Dry	Dry	Wet	Unknown	Dry	Dry		Wet	Wet	Dry	Dry	Dry	Wet	Dry	Dry	Dry	Unknown	Dry	Dry	Dry	Unknown	Dry	Unknown	Dry	Dry	Snow
Weather Condition	Clear	Clear	Cloudy	Cloudy	Cloudy	Cloudy	Clear	Clear	Rain	Clear	Clear	Rain	Unknown	Cloudy	Clear		Rain	Rain	Clear	Clear	Clear	Rain	Clear	Clear	Clear	Unknown	Clear	Clear	Clear	Unknown	Clear	Unknown	Clear	Clear	Clear
Light Condition	Daylight	Daylight	Daylight	Daylight	Daylight	Daylight	Daylight	Daylight	Dark - lighted roadway	Daylight	Daylight	Daylight	Unknown	Daylight	Daylight		Dark - lighted roadway	Daylight	Daylight	Daylight	Daylight	Daylight	Daylight	Daylight	Daylight	Unknown	Daylight	Daylight	Daylight	Unknown	Daylight	Unknown	Dark - lighted roadway	Daylight	Daylight
Manner of Collision	Angle	Angle	Angle	Angle	Rear-end	Rear-end	Angle	Angle	Angle	Angle	Angle	Angle	Unknown	Angle	2:08 PM Sideswipe, same direction		Rear-end	Angle	Rear-end	Angle	Angle	6:21 PM Rear to Rear	Angle	9:09 AM Rear-end	Rear-end	Unknown	Angle	3:43 PM Rear-end	Rear-end	Unknown	Angle	Unknown	Angle	Angle	Angle
Time of Day	6:50 AM Angle	10:40 AM Angle	9:15 AM Angle	4:02 PM Angle	11:34 AM Rear-end	5:05 PM Rear-end	2:33 PM Angle	7:18 PM Angle	8:56 PM Angle	7:21 AM Angle	10:11 AM Angle	12:01 PM Angle		9:25 AM Angle	2:08 PM		10:52 PM Rear-end	8:37 AM Angle	10:44 AM Rear-end	5:32 PM Angle	8:34 AM Angle	6:21 PM	7:56 AM Angle	9:09 AM	12:45 PM Rear-end		1:21 PM Angle	3:43 PM	12:27 PM Rear-end	1	4:05 PM Angle	_	6:52 PM Angle	1:11 PM Angle	2:53 PM Angle
Crash Day Time of Day	Monday	Sunday	Saturday	Tuesday	Monday	Saturday	Sunday	Monday	Monday	Monday	Wednesday	Saturday	Wednesday	Monday	Tuesday		Monday	Tuesday	Sunday	Tuesday	Monday	Saturday	Monday	Tuesday	Thursday	Sunday	Friday	Saturday	Thursday	Monday	Thursday	Monday	Thursday	Friday	Tuesday
Crash Date	4/6/09	4/26/09	2/5/09	6/16/09	6/53/08	7/25/09	8/2/09	60/8/8	9/14/09	60/58/06	60/08/6	10/3/09	1/6/10	2/1/10	2/9/10		3/15/10	3/30/10	4/4/10	4/13/10	4/26/10	5/8/2010	5/17/2010	5/18/2010	6/10/2010	7/18/2010	8/6/2010	9/11/2010	9/16/2010	11/29/2010	12/9/2010	12/13/2010	12/16/2010	12/24/2010	79 12/28/2010
#	46	47	48	49	20	51	25	23	54	22	26	22	28	69	09		61	62	63	64	65	99	67	89	69	20	71	72	73	74	75	9/	77	78	79
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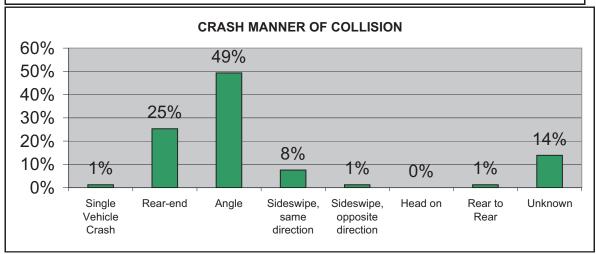
Summary based on Crash Reports obtained from the Abington Police Department & the Registry of Motor Vehicles

#### **Crash Data Summary Tables and Charts**

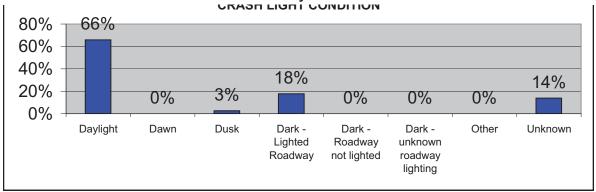


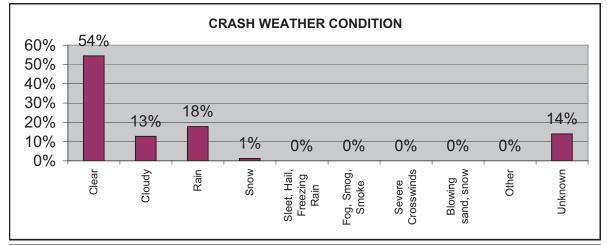


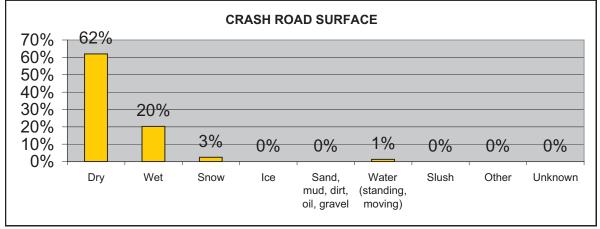


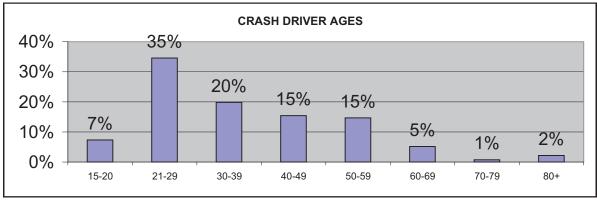


#### Crash Data Summary Tables and Charts



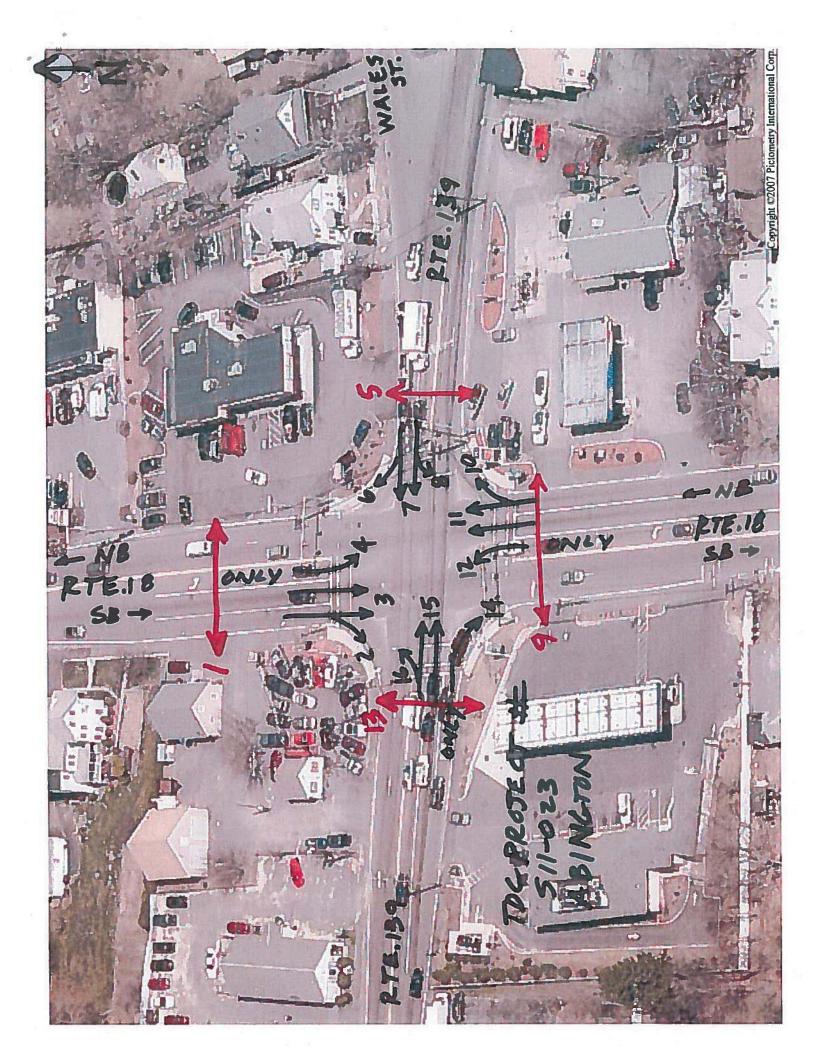






Road Safety Audit Route 18 at Route 139, Abington Prepared by Howard/Stein-Hudson Associates, Inc.

# Appendix D. Additional Information



Statewide Traffic Data Collection

Groups Printed- Cars + Pedestrians - Trucks + Buses

City/Town: Abington

Location: Route 18 & Route 139 Counter #: D4-1120, D4-2552

Project #: S11-023

File Name: S11-023 Abington

Site Code : 00011023 Start Date : 4/27/2011

			Route				-	loute 1				-	Route					oute 1			
		Fr	om No	orth			F	rom E	ast			Fr	om Sc	outh			F	rom W	est		
Start Time	Right #2	Thru #3	Left #4	Peds #1	App. Total	Right #6	Thru #7	Left #8	Peds #5	App. Total	Right #10	Thru#11	Left #12	Peds #9	App. Total	Right #14	Thru#15	Left #16	Peds #13	App. Total	Int. Total
06:30 AM	22	73	10	1	106	16	151	5	0	172	13	176	71	0	260	18	62	23	0	103	641
06:45 AM	18	75	10	0	103	17	112	20	0	149	- 9	180	47	0	236	22	71	21	1	115	603
Total	40	148	20	1	209	33	263	25	0	321	22	356	118	0	496	40	133	44	1	218	1244
07:00 AM	12	117	9	1	139	6	131	13	_ 1	151	15	209	69	0	293	86	66	18	0	170	753
07:15 AM	18	128	15	1	162	15	138	17	3	173	19	221	72	4	316	56	81	25	0	162	813
07:30 AM	30	128	18	1	177	. 12	144	29	2	187	11	202	72	0	285	27	88	19	0	134	783
07:45 AM	26	124	15	0	165	13	110	- 5	0	128	13	146	66	0	225	36	120	32	0	188	706
Total	86	497	57	3	643	46	523	64	6	639	58	778	279	4	1119	205	355	94	0	654	3055
08:00 AM	21	126	9	0	156	13	103	6	0	122	8	175	77	0	260	36	105	28	0	169	707
08:15 AM	19	117	21	0	157	19	134	16	0	169	17	174	47	0	238	30	103	27	0	160	724
08:30 AM	15	110	10	0	135	16	69	12	0	97	14	163	42	0	219	29	89	31	0	149	600
08:45 AM	23	114	21	0	158	17	86	17	0	120	12	163	36	0	211	48	79	27	0	154	643
Total	78	467	61	0	606	65	392	51	0	508	51	675	202	0	928	143	376	113	0	632	2674
09:00 AM	17	101	9	2	129	10	81	21	0	112	21	154	46	0	221	41	76	24	0	141	603
09:15 AM *** BREAK ***	± 14	117	9	0	140	10	75	15	0	100	14	165	45	0	224	35	65	20	0	120	584
Total	31	218	18	2	269	20	156	36	. 0	212	35	319	91	0	445	76	141	44	0	261	1187
*** BREAK **	*																				
02:30 PM	17	158	14	0	189	18	82	21	0	121	28	135	46	0	209	74	113	21	0	208	727
02:45 PM	17	166	20	1	204	21	82	28	0	131	10	135	52	0	197	82	89	33	0	204	736
Total	34	324	34	1	393	39	164	49	0	252	38	270	98	0	406	156	202	54	0	412	1463
						1					ř.					P					11

Total	78	467	61	0	606	65	392	51	0	508	51	675	202	0	928	143	376	113	0	632	2674
09:00 AM	17	101	9	2	129	10	81	21	0	112	21	154	46	0	221	41	76	24	0	141	603
09:15 AM	14	117	9	0	140	10	75	15	Ö	100	14	165	45	0	224	35	65	20	ő	120	584
*** BREAK **									Ū	100		100				- 00				190	
Total	31	218	18	2	269	20	156	36	. 0	212	35	319	91	0	445	76	141	44	0	261	1187
*** BREAK **	*																				
02:30 PM	17	158	14	0	189	18	82	21	0	121	28	135	46	0	209	74	113	21	0	208	727
02:45 PM	17	166	20	1	204	21	82	28	0	131	10	135	52	0	197	82	89	33	0	204	736
Total	34	324	34	1	393	39	164	49	0	252	38	270	98	0	406	156	202	54	0	412	1463
03:00 PM	15	154	18	4	191	22	69	12	0	103	16	151	38	0	205	36	79	21	1	137	636
03:15 PM	23	186	19	0	228	13	96	21	0	130	17	153	52	1	223	48	98	26	1	173	754
03:30 PM	21	162	19	0	202	17	89	31	0	137	20	137	57	. 0	214	62	109	23	0	194	747
03:45 PM	23	161	20	0	204	13	102	25	2	142	18	134	45	2	199	58	117	32	0	207	752
Total	82	663	76	4	825	65	356	89	2	512	71	575	192	3	841	204	403	102	2	711	2889
04:00 PM	19	191	15	1	226	21	71	16	1	109	17	144	57	. 3	221	54	117	21	0	192	748
04:15 PM	30	202	22	0	254	21	109	23	1	154	15	148	38	3	204	60	118	26	1	205	817
04:30 PM	16	-160	18	1	195	22	. 101	11	2	136	15	119	40	3	177	50	136	24	0	210	718
04:45 PM	26	197	13	1_	237	19	119	23	0	161	14	141	58	2	215	54	122	16	0	192	805
Total	91	750	68	3	912	83	400	73	4	560	61	552	193	11	817	218	493	87	1	799	3088
05:00 PM	18	174	32	1	225	18	110	24	0	152	24	166	42	0	232	74	146	30	0	250	859
05:15 PM	30	217	33	0	280	10	120	17	0	147	27	179	47	0	253	59	136	22	0	217	897
05:30 PM	25	191	27	0	243	13	111	26	0	150	4	152	54	2	212	71	135	28	1	235	840
05:45 PM	25	174	26	1_	226	29	93	19	6	147	14	136	26	0	176	73	141	26	0	240	789
Total	98	756	118	2	974	70	434	86	6	596	69	633	169	2	873	277	558	106	1	942	3385
06:00 PM	33	183	24	2	242	17	68	16	3	104	18	134	32	4	188	65	130	32	1	228	762
06:15 PM	20	165	23	0	208	27	73	15	0	115	15	131	35	0	181	62	134	35	0	231	735
Grand Total	593	4171	499	18	5281	465	2829	504	21	3819	438	4423	1409	24	6294	1446	2925	711	6	5088	20482
Apprch %	11.2	79	9.4	0.3		12.2	74.1	13.2	0.5		7	70.3	22.4	0.4		28.4	57.5	14	0.1		
Total %	2.9	20.4	2.4	0.1	25.8	2.3	13.8	2.5	0.1	18.6	2.1	21.6	6.9	0.1	30.7	7.1	14.3	3.5	0	24.8	
Cars + Pedestrians	554	4012	474	16	5056	428	2735	488	21	3672	414	4270	1349	24	6057	1381	2820	673	6	4880	19665
% Cars + Pedestrians	93.4	96.2	95	88.9	95.7	92	96.7	96.8	100	96.2	94.5	96.5	95.7	100	96.2	95.5	96.4	94.7	100	95.9	96
Trucks + Buses	39	159	25	2	225	37	94	16	0	147	24	153	60	0	237	65	105	38	0	208	817
% Trucks + Buses	6.6	3.8	5	11.1	4.3	8	3.3	3.2	0	3.8	5.5	3.5	4.3	0	3.8	4.5	3.6	5.3	0	4.1	4

# Massachusetts Department of Transportation - Highway Division Statewide Traffic Data Collection

City/Town: Abington

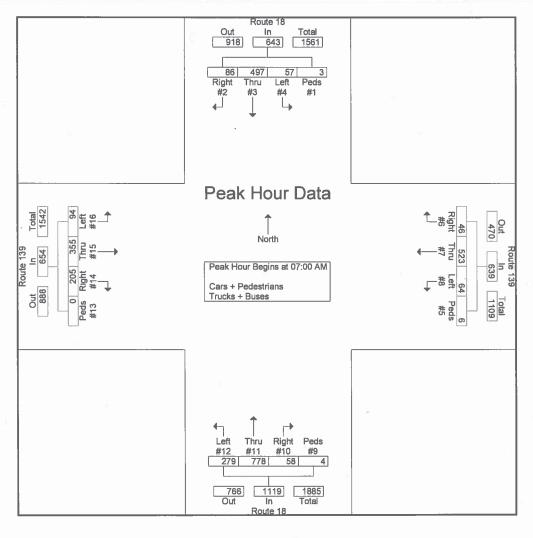
Location: Route 18 & Route 139 Counter #: D4-1120, D4-2552

Project #: S11-023

File Name: S11-023 Abington

Site Code : 00011023 Start Date : 4/27/2011

		-	Route om No			Route 139 From East							Route om So								
Start Time	Right #2	Thru #3	Left #4	Peds #1	App. Total	Right #6	Thru #7	Left #8	Peds #5	App. Total	Right #10	Thru#11	Left #12	Peds #9	App. Total	Right #14	Thru #15	rom W	Peds #13	App. Total	Int. Total
Peak Hour Ar	nalysis	From	06:30 /	AM to	11:45 AN	1 - Pea	k 1 of	1								-					
Peak Hour for	r Entire	Inters	section	Begins	s at 07:0	0 AM															
07:00 AM	12	117	9	1	139	6	131	13	1	151	15	209	69	0	293	86	66	18	0	170	753
07:15 AM	18	128	15	1	162	15	138	17	3	173	19	221	72	4.	316	56	81	25	0	162	813
07:30 AM	30	128	18	1	177	12	144	29	2	187	11	202	72	0	285	27	88	19	0	134	783
07:45 AM	26	124	15	0	165	13	110	5	0	128	13	146	66	0	225	36	120	32	0	188	706
Total Volume	86	497	57	3	643	46	523	64	6	639	58	778	279	4	1119	205	355	94	0	654	3055
% App. Total	13.4	77.3	8.9	0.5		7.2	81.8	10	0.9		5.2	69.5	24.9	0.4		31.3	54.3	14.4	0		
PHF	.717	.971	.792	.750	.908	.767	.908	.552	.500	.854	.763	.880	.969	.250	.885	.596	.740	.734	.000	.870	.939



Statewide Traffic Data Collection

City/Town: Abington

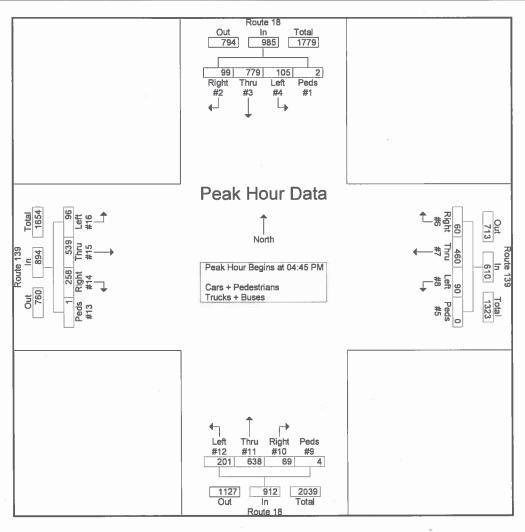
Location: Route 18 & Route 139 Counter #: D4-1120, D4-2552

Project #: S11-023

File Name: S11-023 Abington

Site Code : 00011023 Start Date : 4/27/2011

	Route 18 From North						Route 139 From East						Route om So									
			OIH ITC	/I UI		I TOTTI Last					Fioni South						From West					
Start Time	Right #2	Thru #3	Left #4	Peds #1	App Total	Right #6	Thru #7	Left #8	Peds #5	App. Total	Right #10	Thru#11	Left #12	Peds #9	App Total	Right #14	Thru #15	Left #16	Peds #13	App Total	Int. Total	
Peak Hour A	nalysis	From	12:00 F	M to 0	06:15 PN	/ - Pea	k 1 of	1														
Peak Hour fo	r Entire	Inters	ection	Begins	s at 04:4	5 PM																
04:45 PM	26	197	13	1	237	19	119	23	0	161	14	141	58	2	215	54	122	16	0	192	805	
05:00 PM	18	174	32	1	225	18	110	24	0	152	24	166	42	0	232	74	146	30	0	250	859	
05:15 PM	30	217	33	0	280	10	120	17	0	147	27	179	47	0	253	59	136	22	0	217	897	
05:30 PM	25	191	27	0	243	13	111	26	0	150	4	152	54	2	212	71	135	28	1	235	840	
Total Volume	99	779	105	2	985	60	460	90	0	610	69	638	201	4	912	258	539	96	1	894	3401	
% App. Total	10.1	79.1	10.7	0.2		9.8	75.4	14.8	0		7.6	70	22	0.4		28.9	60.3	10.7	0.1			
PHF	.825	.897	.795	.500	.879	.789	.958	.865	.000	.947	.639	.891	.866	.500	.901	.872	.923	.800	.250	.894	.948	



Statewide Traffic Data Collection

City/Town: Abington

Location: Route 18 & Route 139 Counter #: D4-1120, D4-2552

Project #: S11-023

File Name: S11-023 Abington

Site Code : 00011023 Start Date : 4/27/2011

								Group	s Prin	ted- Ca	rs + P										1
		-	Route 1	-				oute 1				-	loute					oute 1			
Start Time		-	om No				Thru #7	rom Ea		App. Total		Thru#11	om So	Peds #9	App. Total	Right #14	Thru#15	Left #16	Peds #13	App. Total	Int. Total
06:30 AM	Right #2	Thru #3	Len #4	Peds #1	App. Total 98	Right #6	145	Leπ #6	Peda #5	163	Right #10	167	69	Peds #9	248	17	60	23	Peds #13	100	609
06:45 AM	13	70	9	ò	92	16	110	20	0	146	9	167	46	Ö	222	20	67	21	1	109	569
Total	33	139	17	1	190	30	255	24	0	309	21	334	115	0	470	37	127	44	1	209	1178
07:00 AM	9	117	- 8	1	135	4	129	13	1	147	15	198	66	0	279	83	59	17	0	159	720
07:15 AM	18	125	13	i	157	13	134	17	3	167	14	215	72	4	305	51	75	22	Ö	148	777
07:30 AM	27	126	14	ó	167	10	139	26	2	177	11	192	68	Ö	271	26	83	19	ō	128	743
07:45 AM	23	116	14	Ö	153	12	108	5	0	125	10	139	60	0	209	34	113	30	0	177	664
Total	77	484	49	2	612	39	510	61	6	616	50	744	266	4	1064	194	330	88	0	612	2904
08:00 AM	20	120	9	0	149	11	98	6	0	115	8	167	73	0	248	34	95	24	0	153	665
08:15 AM	12	110	20	Ō	142	18	128	14	0	160	16	165	42	0	223	28	102	26	0	156	681
08:30 AM	14	102	10	Ö	126	15	69	12	0	96	13	158	40	0	211	29	84	29	0	142	575
08:45 AM	23	107	19	Ö	149	16	85	17	Ō	118	11	158	34	0	203	46	72	27	0	145	615
Total	69	439	58	0	566	60	380	49	0	489	48	648	189	0	885	137	353	106	0	596	2536
09:00 AM	16	94	8	1	119	10	77	20	0	107	21	146	46	0	213	40	75	20	0	135	574
09:00 AM	13	109	9	Ó	131	10	68	14	0	92	13	162	43	0	218	32	63	19	0	114	555
*** BREAK **		109	9		131	10	00	1-4	U	52	15	102	40		210	52	03			117	A
Total	29	203	17	1	250	20	145	34	0	199	34	308	89	0	431	72	138	39	0	249	1129
*** BREAK **	w								2												
02:30 PM	16	153	13	0	182	17	79	21	0	117	28	134	43	0	205	65	111	20	0	196	700
02:45 PM	17	158	20	1	196	19	79	27	0	125	9	131	46	0	186	78	84	32	0	194	701
Total	33	311	33	1	378	36	158	48	0	242	37	265	89	0	391	143	195	52	0	390	1401
03:00 PM	14	147	18	4	183	20	69	12	0	101	16	146	37	0	199	34	75	21	1	131	614
03:15 PM	22	179	19	0	220	12	94	21	0	127	16	148	50	1	215	46	93	25	1	165	727
03:30 PM	20	150	19	- 0	189	11	83	30	0	124	19	131	56	0	206	62	107	20	0	189	708
03:45 PM	23	150	19	0	192	12	97	25	2	136	16	130	44	2	192	56	115	27	0	198	718
Total	79	626	75	4	784	55	343	88	2	488	67	555	187	3	812	198	390	93	2	683	2767
04:00 PM	18	184	14	1	217	20	70	13	1	104	14	141	54	3	212	52	114	19	0	185	718
04:15 PM	30	197	20	0	247	19	105	23	1	148	15	141	36	3	195	56	115	26	1	198	788
04:30 PM	15	157	17	1	190	21	99	10	2	132	14	116	39	3	172	48	131	24	. 0	203	697
04:45 PM	24	189	13	1	227	18	116	22	0	156	14	138	56	2	210	50	121	16	0	187	780
Total	87	727	64	3	881	78	390	68	4	540	57	536	185	11	789	206	481	85	1	773	2983
05:00 PM	18	170	32	1	221	17	107	24	0	148	23	160	41	0	224	70	142	28	0	240	833
05:15 PM	28	211	32	0	271	9	117	17	0	143	26	175	46	0	247	57	134	22	0	213	874
05:30 PM	24	188	25	- 0	237	12	108	25	0	145	4	149	52	2	207	71	132	26	1	230	819
05:45 PM	25	173	26	1	225	29	90	19	6	144	14	134	26	0	174	73	137	24	0	234	777
Total	95	742	115	2	954	67	422	85	6	580	67	618	165	2	852	271	545	100	1	917	3303
06:00 PM	32	181	24	2	239	17	62	16	3	98	18	133	32	4	187	63	129	32	1	225	749
06:15 PM	20	160	22	0	202	26	70	15	0	111	15	129	32	0	176	60	132	34	0	226	715
Grand Total	554	4012	474	16	5056	428	2735	488	21	3672	414	4270	1349	24	6057	1381	2820	673	6	4880	19665
Apprch %	11	79.4	9.4	0.3		11.7	74.5	13.3	0.6		6.8	70.5	22.3	0.4		28.3	57.8	13.8	0.1		
												21.7	6.9	0.1	30.8	7	14.3	3.4	0	24.8	

Statewide Traffic Data Collection

City/Town: Abington

Location: Route 18 & Route 139 Counter #: D4-1120, D4-2552

Project #: S11-023

File Name: S11-023 Abington

Site Code : 00011023 Start Date : 4/27/2011

	Groups Printed- Trucks + Buses  Route 18 Route 139 Route 18 Route 139																				
								oute 1	139			F	Route								
01-17			om No					rom E				-	om So					rom W			
Start Time	Right #2	Thru #3	Left #4	Peds #1	App. Total	Right #6		Left #8	Peds #5	App. Total	Right #10	Thru#11	Left #12	Peds #9	App. Total	Right \$14	Thru #15	Left #16	Peds #13	App. Total	Int. Total
06:30 AM	2	4	2	0	8	2	6	1	0	9	1	9	2	0	12	1	2	0	0	3	32
06:45 AM	5	5 9	1 3	0	11	1	2	0	0	3	0	13	1	0	14	2	<u>4</u>	0	0	6	34
Total	/	9	3	U	19	3	8	1	0	12	1	22	3	0	26	3	6	0	0	. 9	66
07:00 AM	3	0	1	0	4	2	2	0	0	4	0	11	3	0	14	3	7	1	0	11	33
07:15 AM	0	3	2	0	5	2	4	0	0	6	5	6	0	0	11	5	6	3	0	14	36
07:30 AM	3	2	4	1	10	2	5	- 3	0	10	0	10	4	0	14	1	5	0	0	6	40
07:45 AM	3	8	1	0	12	1	2	0	0	3	3	7	6	0	16	2	7	2	0	11	42
Total	9	13	8	1	31	7	13	3	0	23	8	34	13	0	55	11	25	6	0	42	151
08:00 AM	1	6	0	0	7	2	5	0	0	7	0	8	4	0	12	2	10	4	0	16	42
08:15 AM	7	. 7	1	0	15	1	6	2	0	9	1	9	5	0	15	2	1	1	0	4	43
08:30 AM	1	8	. 0	0	9	1	0	0	0	1	1	5	2	0	8	.0	5	- 2	0	. 7	25
08:45 AM	0	7	2	0	9	1	1	0	0	2	1	5	2	0	8	2	7	0	0	9	28
Total	9	28	3	0	40	5	12	2	0	19	3	27	13	0	43	6	23	7	0	36	138
09:00 AM	1	7	1	1	10	0	4	1	0	5	0	8	0	0	8	1	1	4	0	6	29
09:15 AM	1	8	0	0	9	0	7	1	0	8	1	3	2	0	6	3	2	1	0	6	29
** BREAK **	*																				
Total	2	15	1	1	19	0	- 11	2	0	13	1	11	2	0	14	4	3	5	0	12	58
** BREAK **	*																				
02:30 PM	1	5	1	0	7	1	3	0	0	4	0	1	3	0	4	9	2	1	0	12	27
02:45 PM	0	8	0	0	8	2	3	1	0	6	1	4	6	0	11	4	5	1	0	10	35
Total	1	13	1	0	15	3	6	1	0	10	1	5	9	0	15	13	7	2	0	22	62
03:00 PM	- 1	7	0	0	8	2	. 0	0	0	2	0	5	<sup>3</sup> 1	0	6	2	4	0	0	6	22
03:15 PM	1	7	Ō	Ō	8	1	2	Ō	0	3	1	5	2	0	- 8	2	5	1	0	8	27
03:30 PM	1.	12	0	0	13	6	6	1	0	13	1	6	1	0	8	0	2	3	0	5	39
03:45 PM	0	11	= 1	0	12	1	5	0	0	6	2	4	1	0	7	2	2	5	0	9	34
Total	3	37	1	0	41	10	13	1	0	24	4	20	5	0	29	6	13	9	0	28	122
04:00 PM	1	7	1	0	9	1	1	3	0	5	3	3	3	0	9	2	3	2	0	7	30
04:15 PM	Ö	5	2	0	7	2	4	0	Ö	6	0	7	2	0	9	4	3	0	= 0	7	29
04:30 PM	1	3	- 1	Ö	5	1	2	1	0	4	1	3	1	0	5	2	5	Ō	Ö	7	21
04:45 PM	2	8	Ö	Ö	10	1	3	i	0	5	o o	3	2	0	5	4	1	0	Ö	5	25
Total	4	23	4	0	31	5	10	5	0	20	4	16	8	0	28	12	12	2	0	26	105
05:00 PM	0	4	0	0	4	1	3	- 0	0	4	1	6	1	0	8	4	4	2	0	10	26
05:15 PM	2	6	1	0	9	Ιi	3	0	0	4	i	4	i i	0	6	2	2	0	0	4	23
05:30 PM	1	3	2	0	6	l i	3	1	0	5	Ö	3	2	Ö	5	0	3	2	0	5	21
05:45 PM	ò	1	ō	Ô	1	Ö	3	Ó	0	3	0	2	ō	0	2	0	4	2	Ö	6	12
Total	3	14	3	0	20	3	12	1	0	16	2	15	4	0	21	6	13	6	0	25	82
06:00 PM	1	2	0	0	3	0	6	0	15	6	0	5 <b>1</b>	0	0	1	2	1	0	0	3	13
06:00 PM	0	5	1	0	6	1	3	0	0	4	0	2	3	0	5	2	2	1	0	5	20
Grand Total	39	159	25	2	225	37	94	16	0	147	24	153	60	0	237	65	105	38	0	208	817
Apprch %	17.3	70.7	11.1	0.9	225	25.2	63.9	10.9	0	17/	10.1	64.6	25.3	0	201	31.2	50.5	18.3	0		3
	11.0	1.0.1	1 1 1 1	0.3					-		1 1001	- T. O		_					_		

# Massachusetts Department of Transportation - Highway Division Statewide Traffic Data Collection

City/Town: Abington

Location: Route 18 & Route 139 Counter #: D4-1120, D4-2552

Project #: S11-023

File Name: S11-023 Abington

Site Code : 00011023 Start Date : 4/27/2011

Page No : 1

**Groups Printed-Bicycles** 

			Route '			Route 139						F	Route	18							
Y		Fr	om No	rth			F	rom E	ast			Fr	om So	uth			Fr	om W	est		
Start Time	Right #2	Thru #3	Left #4	Peds #1	App. Total	Right #6	Thru #7	Left #8	Peds #5	App Total	Right #10	Thru#11	Left #12	Peds #9	App. Total	Right #14	Thru#15	Left #16	Peds #13	App. Total	Int. Total
*** BREAK ***	k .																,				
07:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
*** BREAK ***	ir.																				
08:15 AM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
08:30 AM *** BREAK ***	0	0	0	0	0	0	1	0	0	1	. 0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
*** BREAK ***	*																				
02:30 PM   *** BREAK **		0	0	0	0	0	0	0	0	0	0	0	0	1	<sub>3</sub> 1	0	2	0	0	. 2	3
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	2	3
*** BREAK ***	*																				
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	70 O	0	0	0	1	0	0	. 1	1
*** BREAK **						1															1
05:45 PM	0	0	0	0	0	0	1	0	. 0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	- 0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00 PM   *** BREAK ***	. 0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	1	. 0	0	0	1	1
Grand Total	0	1	0	0	1	0	5	0	. 0	5	0	0	0	1	a 1	1	3	0	0	4	11
Apprch %	0	100	0	0		0	100	0	. 0		0	0	0	100		25	75	0	0		
Total %	0	9.1	0	0	9.1	0	45.5	0	0	45.5	0	0	0	9.1	9.1	9.1	27.3	0	0	36.4	

# Bing Maps Abington, MA

My Notes

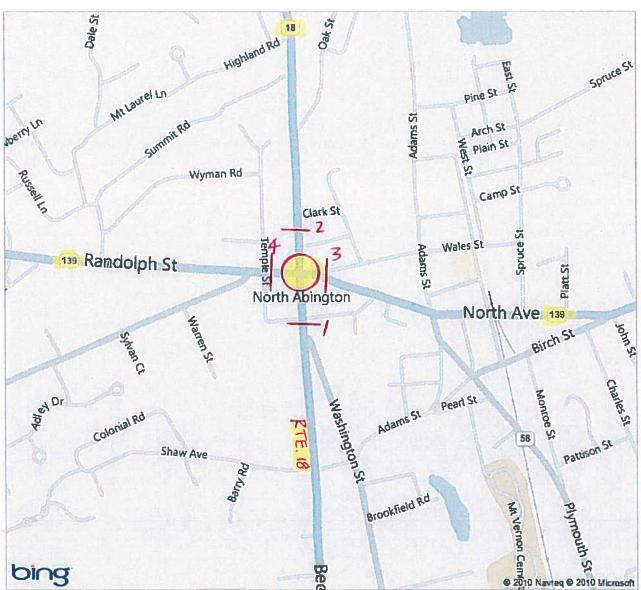
TDC PROJECT #

S11-023

ABINGTON

FREE! Use Bing 411 to find movies,





#### Mass Highway Department WEEKLY SUMMARY FOR LANE 1 Starting: 4/25/2011

Page: 1

Site Reference: 011023000452

Site ID: 000000000101

Location: RTE. 18 SOUTH OF RTE. 139

Direction: NORTH

57A, INB
File: 101.prn
City: ABINGTON
County: VOL N.B.

TIME				THU	FRI		SAT	SUN	WEEK	TOTAL
	25	26	27	28		AVG			AVG	
01:00		50	46	61		52			52	157
02:00		29	32	33 -		31			31	94
03:00		22	28	25		25			25	75
04:00		42	51	41		44			44	134
05:00		159	158	159		158			158	476
06:00		569	545	545		553			553	1659
07:00		965	920	935		940			940	2820
08:00		1262	1297	1350		1303			1303	3909
09:00			1034	1036		1029			1029	3088
10:00		854	865	880		866			866	2599
11:00		680	688	692		686			686	2060
12:00		742	775			758			758	1517
13:00		827	822			824			824	1649
14:00	766	778	796			780			780	2340
15:00	930	885	909			908			908	2724
16:00	838	907	877			874			874	2622
17:00	812	860	867			846			846	2539
18:00	884	952	894			910			910	2730
19:00	648	742	725			705			705	2115
20:00	608	599	570			592			592	1777
21:00	399	449	445			431			431	1293
22:00	279	344	310			311			311	933
23:00	215	252	267			244			244	734
24:00	93		117			114			114	342
TOTALS	6472	14119	14038	5757	0	13984	_ 0	0	13984	40386
% AVG WKDY	46.2	100 9	100 3	41.1						
	46.2			41.1						
AM Times		08:00	08:00	08:00		08:00			08:00	
AM Peaks		1262	1297	1350		1303			1303	
	15:00		15:00			18:00			18:00	
PM Peaks	930	952	909			910			910	

43

NB 13984 58 14035 COMB AND 28019 FAC ,93 (.97) COMB ADT 25,300 STA.15B

Site Reference: 011023000863

Site ID: 00000000102 Location: RTE. 18 SOUTH OF RTE. 139 Direction: SOUTH

File: 102.prn City: ABINGTON County: VOL S.B.

TIME	MON	TUE	WED		FRI	WKDAY	SAT	SUN		TOTAL
	25	26	27	28		AVG			AVG	
01:00		104	106	122		110			110	332
02:00		29	60	53		47			47	142
03:00		26	31	31		29			29	88
04:00		22	28	31		27			27	81
05:00		45	40	45		43			43	130
06:00		140	137	139		138			138	416
07:00		335	362	374		357			357	1071
08:00		863	908	881		884			884	2652
09:00		683	693	749		708			708	2125
10:00		660	751	710		707			707	2121
11:00		680	694	704		692			692	2078
12:00		753	795			774			774	1548
13:00		783	809			796			796	1592
14:00	890	861	849			866			866	2600
15:00	958	1059	1080			1032			1032	3097
16:00	1045	1121	1139			1101			1101	3305
17:00	1132		1189	+0		1161			1161	3485
18:00	1203	1268	1245		-	1238			1238	3716
19:00	992	1155	1066			1071			1071	3213
20:00	769	790	758			772			772	2317
21:00	536	597	591			574			574	1724
22:00	331		403			387			387	1161
23:00	236	330	301			289			289	867
24:00	200		261			232			232	697
TOTALS				3839		14035	0	0	14035	40558
% AVG WKDY	59	100.6	101.8	27.3						
% AVG WEEK	59	100.6	101.8	27.3						
AM Times		08:00	08:00	08:00		08:00			08:00	
AM Peaks		863	908	881		884			884	
PM Times	18:00	18:00	18:00			18:00			18:00	
PM Peaks	1203	1268	1245			1238			1238	

STAIZNB

Site Reference: 011023000803

Site ID: 000000020102

Location: RTE, 18 NORTH OF RTE, 139

Direction: NORTH

File: 20102.prn City: ABINGTON County: DIR VOL N&S

TIME					FRI	WKDAY	SAT	SUN		TOTAL
	25	26	27	28		AVG			AVG	
01:00		45	41	47		44			44	133
02:00				29		28			28	85
03:00		23	33	25'		27			27	81
04:00		39	51	39		43			43	129
05:00		149		146		143			143	
06:00		565	535	528		542			542	1628
07:00		820	811	812		814			814	2443
08:00		1028		1084		1037			1037	
09:00		883	939	908		910			910	2730
10:00		760	779	830		789			789	2369
11:00		638	658	664		653			653	1960
12:00		690	687			688			688	1377
13:00		773	702			737			737	1475
14:00	698		685			680			680	2041
15:00	768	749	740			752			752	2257
16:00	760	769	765			764			764	
17:00	701	743	756			733			733	
18:00	737	755	824			772			772	2316
19:00	599	666	710			658			658	1975
20:00	518	518	517			517			517	1553
21:00	365	392	388			381			381	1145
22:00	229	290	260			259			259	779
23:00	201	245	216			220			220	662
24:00	80	117	107			101			101	304
TOTALS	5656	12343	12367	5112	0	12292	0	0	12292	35478
% AVG WKDY	46	100.4	100.6	41.5						
% AVG WEEK	46			41.5						
AM Times		08:00	08:00	08:00		08:00			08:00	
AM Peaks		1028	999	1084		1037			1037	
PM Times	15.00	13.00	= 18:00			18:00			18:00	
	768					772			772	
142 14450	, 00	,,,	024						7 1 00	

43

XB 12292 5B 10860 COMB AWD 23152 FAC .93(.97) COMB ADT 20,900 STA. 2 SB

Site Reference: 011023000803

Site ID: 00000020102 Location: RTE. 18 NORTH OF RTE. 139 Direction: SOUTH

File: 20102.prn City: ABINGTON County: DIR VOL N&S

TIME	MON	TUE	WED	THU	FRI	WKDAY	SAT	SUN	WEEK	TOTAL
	25	26	27	28		AVG			AVG	
01:00		88	95	109		97			97	
02:00		29	48	53		43			43	
03:00		26	24	24		24			24	
04:00			32	33		30			30	
05:00				35		38			38	
06:00		123		119		120			120	
07:00		290		325		314			314	
08:00		585	556	571		570			570	
09:00		543		551		544			544	
10:00		467		533		518			518	
11:00		540		570		553			553	
12:00		604				606			606	
13:00		633	643			638			638	1276
14:00	697					691			691	2075
15:00	698	738	766			734			734	2202
16:00	801	799	798			799			799	2398
17:00	817	825	837			826			826	2479
18:00	870	749	884			834			834	2503
19:00	782	841	810			811			811	2433
20:00	614	663	693			656			656	1970
21:00	538	560	549			549			549	
22:00	339	387	386			370			370	1112
23:00	232	298	292			274			274	822
24:00	201	212	250			221			221	663
TOTALS				2023		10060			10960	31358
TOTALS	0303	10700	11000	2923		10000	·	•	10000	31330
% AVG WKDY	60.6	99.1	102	26.9						
% AVG WEEK	60.6	99.1	102	26.9						
***		10.00	10.00	00.00		10.00			10.00	
				08:00					12:00	
AM Peaks		604	609	571		606			606	
PM Times	18:00	19:00	18:00			18:00			18:00	
PM Peaks	870	841	884			834			834	

#### Mass Highway Department WEEKLY SUMMARY FOR LANE 1 Starting: 4/25/2011

Page: 1

Site Reference: 011023000899

Site ID: 00000000303

Location: RTE. 139 EAST OF RTE. 18

Direction: EAST

STA 3 EB File: 303.prn City: ABINGTON County: VOL E.B.

TIME	MON	TUE	WED	THU	FRI	WKDAY	SAT	SUN	WEEK	TOTAL
	25	26	27	28		AVG			AVG	
01:00		29	41	37		35			35	107
02:00		7	26	27		20			20	60
03:00		15	21	8		14			14	44
04:00		8	19	17		14			14	44
05:00		29	25	27		27			27	81
06:00		98	89	91		92			92	278
07:00		266	266	275		269			269	807
08:00		449	465	411		441			441	1325
09:00		428	459	463		450			450	
10:00		291	332	342		321			321	965
11:00		325	311	317		317			317	953
12:00		341	370			355			355	711
13:00		369				368			368	736
14:00	335	376	365			358			358	1076
15:00	460	470	478			469			469	
16:00	521	545	558			541			541	1624
17:00	588	571	593			584			584	1752
18:00	626	632	697			651			651	1955
19:00	465	537	521			507			507	1523
20:00	362	377	360			366			366	1099
21:00	262	246	222			243			243	730
22:00	164					181			181	543
23:00	91	112	128			110			110	331
24:00	73	63	77			71			71	213
TOTALS	3947	6768	6985	2015	0	6804	0	0	6804	19715
% AVG WKDY										
% AVG WEEK	58	99.4	102.6	29.6						
AM Times				09:00		09:00			09:00	
AM Peaks		449	465	463		450			4.50	
PM Times						18:00			18:00	
PM Peaks	626	632	697			651			651	

45 EB 6804 WB 9498 COMB AND 16302 FAC .93(.98) COMB ADT 14,900

# Mass Highway Department WEEKLY SUMMARY FOR LANE 1 Starting: 4/25/2011

STA BWB

Page: 1

Site Reference: 011023000422 Site ID: 00000000304 Location: RTE. 139 EAST OF RTE. 18

Direction: WEST

File: 304.prn City: ABINGTON County: VOL W.B.

TIME	MON	THE	WED	THU	FRI	WKDAY	SAT	SUN	WEEK	TOTAL
*******	25		27			AVG		-	AVG	
01.00		39	70	49		52			52	158
01:00 02:00			70 27			23			23	69
03:00			20			21			21	63
04:00		20	23			20			20	61
05:00		64				69			69	208
06:00			278			276				830
07:00		_		687		684			684	
08:00		840		846		836			836	2509
09:00		765	755	761		760			760	2281
10:00		515	511	535		520			520	1561
11:00		468	481	534		494			494	1483
12:00		499	448			473			473	947
13:00		524	498			511			511	1022
14:00	500	472	490			487			487	1462
15:00	571	578	575			574			574	1724
16:00	599	635	631			621			621	1865
17:00	565	619	673			619			619	1857
18:00	629	619	681			643			643	1929
19:00	488	580	583			550			550	1651
20:00	477		457			466			466	
21:00	334		346			331			331	995
22:00	200		198			212			212	
23:00		190				157				471
24:00	104	102	92			99			99	298
TOTALS	4598	9532	9570	3832	0	9498	0	0	9498	27532
% AVG WKDY	48.4	100.3	100.7	40.3	2					
	48.4		100.7							
			5							
AM Times				08:00					08:00	
AM Peaks		840	823	846		836			836	
PM Times	18:00	16:00	18:00			18:00			18:00	
PM Peaks	629	635	681			643			643	

Site Reference: 011023000455

Site ID: 000000040304

Location: RTE, 139 WEST OF RTE, 18

Direction: EAST

STA 4 EB
File: 40304.prn
City: ABINGTON
County: VOL E.B.

DITECTION. E	aro I									
TIME	MON 25	TUE 26	WED 27	THU 28	FRI	WKDAY AVG	SAT	SUN	WEEK	TOTAL
01:00		48	48	56		50			50	152
02:00		16	33	33		27			27	82
03:00		17	34	18		23			23	69
04:00		12	19	21		17			17	52
05:00		43	44	47		44			44	134
06:00		152	155	148		151			151	455
07:00		353	371	365		363			363	1089
08:00		695	686	672		684			684	2053
09:00		628	634	654		638			638	1916
10:00		491	505	474		490			490	1470
11:00		463	454	427		448			448	1344
12:00		464	511			487			487	975
13:00		512	505			508			508	1017
14:00	526	525	502			517			517	1553
15:00	696	704	745			715			715	2145
16:00	753	801	767			773			773	2321
17:00	830	821	830			827			827	2481
18:00	875	837	945			885			885	2657
19:00	696	812	788			765			765	2296
20:00	508	557	469			511			511	1534
21:00	307	277	298			294			294	882
22:00	197	241	237			225			225	675
23:00	114	168	172			151			151	454
24:00	92	97	93			94			94	282
TOTALS	5594		9845		0	9687	0	0	9687	28088
IOIALS	3334	3734	3043	2320			•			
% AVG WKDY	57.7	100.4	101.6	30						
% AVG WEEK	57.7	100.4	101.6	30			i.			
AM Times		08:00	08:00	08:00		08:00			08:00	
AM Peaks		695	686	672		684			684	
PM Times	18:00	18:00	18:00			18:00			18:00	
PM Peaks	875	837	945			885			885	

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EB 9687 WB 9879 COMB AWD 19566 FAC .93(.97) COMB ADT 17,700 STA.4WB

Site Reference: 011023000455 Site ID: 000000040304 Location: RTE. 139 WEST OF RTE. 18 Direction: WEST

File: 40304.prn City: ABINGTON County: VOL E.B.

TIME	MON 25	TUE 26	WED 27	THU 28	FRI	WKDAY AVG	SAT	SUN	WEEK AVG	TOTAL
01:00		37	56	68		53			53	161
02:00		_	25	29		25			25	77
03:00	38		18	21		16			16	50
04:00		26	26	25		25			25	77
05:00		58	77	57		64			64	192
06:00		262	253	288		267			267	803
07:00		771	758	732		753			753	2261
08:00		1006	988	971		988			988	2965
09:00		861	780	809		816			816	2450
10:00		512	516	490		506			506	1518
11:00		417	445	451		437			437	1313
12:00		417	431			424			424	848
13:00		491	470			480			480	961
14:00	481	467	533			493			493	1481
15:00	655	588	623			622			622	1866
16:00	593	651	667			637			637	1911
17:00	630	672	715			672			672	2017
18:00	699	692	704			698			698	2095
19:00	493	581	551			541			541	1625
20:00	469	501	489			486			486	1459
21:00	357	327	372			352			352	1056
22:00	230	271	227			242			242	728
23:00	148	180	195			174			174	523
24:00		103	105			108			108	326
TOTALS	4873	9925	10024	3941	0	9879	0	0	9879	28763
% AVG WKDY	40.3	100 4	101 4	30 8						
% AVG WADI		100.4								
* AVG WEEK	49.3	100.4	101.4	33.0						
AM Times		08:00	08:00	08:00		08:00			08:00	
AM Peaks				971		988			988	
AM reaks		1000	300	3,2		, , ,				
PM Times	18:00	18:00	17:00			18:00			18:00	
PM Peaks	699	692	715			698			698	
			7.							

# THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS

#### SPECIAL SPEED REGULATION NO. 769

Highway Location:

WEYMOUTH, ABINGTON, WHITMAN, EAST BRIDGEWATER, BRIDGEWATER, MIDDLEBOROUGH, LAKEVILLE AND FREETOWN

Authority In Control:

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

Name of Highway:

WEYMOUTH-STATE HIGHWAY-Route 18
ABINGTON-STATE HIGHWAY-Route 18
WHITMAN- STATE HIGHWAY-Route 18
EAST BRIDGEWATER-STATE HIGHWAY-Route 18
BRIDGEWATER-STATE HIGHWAY-Route 18
MIDDLEBOROUGH-STATE HIGHWAY-Route 18
LAKEVILLE-STATE HIGHWAY-Route 18
FREETOWN-STATE HIGHWAY-Route 18

In accordance with the provisions of Section 18 Chapter 90 of the General Laws (Ter. Ed.) the following Special Speed Regulation is hereby promulgated.

Special Speed Regulations Numbered 318, 318A, 318B and 483 dated February 16, 1966, August 10, 1966, May 11, 1970 and September 23, 1969 respectively are hereby amended by striking out the Regulations in their entireties and inserting in place thereof the following revision and addenda.

The following designated speed limits are established at which motor vehicles may be operated in the areas described.

#### SOUTHBOUND

Beginning in Weymouth 385 feet south of the junction of 53

Thence southerly

0.66	miles	at	40	miles	per	hour			
	81								
	11								
1.07	н	11	40	H	11	11			
0.40	Ħ	8.0	45	11	- 11	11	to	the	Abington

line.

```
Thence southerly in Abington
                   1.08 miles at 45 miles per hour
                   0.28 " " 35 "
                                    11
                            " 45
                   1.09
                            " 35
                   0.68
                                    11
                                                 to the Whitman
                            ". 45
                   0.52
line.
Thence southerly in Whitman
                   0.67 miles at 45 miles per hour
                                35 " "
                   0.40
                            " 40
                                    11
                   0.44
                         $ $
                            " 35
                   0.25
                                    11
                         " 45
                   0.47
                            " 50
                                                 to the East Bridgewater
                    0.08
line.
Thence southerly in East Bridgewater
                    0.58 miles at 50 miles per hour
                        " 45 "
                    1.27
                                   11
                            " 30
                    0.37
                            " 45
                                    11
                    0.87
                                   11
                        - 11
                            " 40
                    0.48
                            " 50
                                                 to the Bridgewater line.
                    0.20
Thence southerly in Bridgewater
                    0.29 miles at 50 miles per hour
                    0.35 " " 45 " " "
                        " " 40 " " " to the end of
                    0.39
State Highway north of Town.
    Beginning again in Middleborough 280 feet south of the Bedford Street
Circle
Thence southerly
                    0.36 miles at 45 miles per hour
                    0.24 " " 50 " " to the Lakeville line.
Thence southerly in Lakeville
                    1.34 miles at 50 miles per hour
                             " 45
                    0.22
                                     11
                                50
                    1.65
                                40
                    1.09
                                35 "
                             11
                    0.36
                         - 11
                                45
                    1.35
                    0.14 "
                             11
                                25
                    0.46 " 40
```

to the Freetown line.

1.46 " "

45

```
Thence southerly in Freetown
```

```
0.70 miles at 45 miles per hour
0.58 " " 35 " " " "
1.01 " " 45 " " " "
0.77 " " 40 " " " "
0.17 " " 30 " " " ending at the
```

New Bedford City line, the total distance being 27.21 miles.

#### NORTHBOUND

Beginning in Freetown at the Freetown New Bedford line

Thence northerly in Freetown

```
0.43 miles at 45 miles per hour
0.89 " 40 " " "
1.01 " 45 " " "
0.58 " " 35 " " " to the Lakeville line.
```

Thence northerly in Lakeville

```
1.46 miles at 45 miles per hour
0.46 " " 40
         25
0.14
                 11
            H
1.35 "
      " 45
0.36 "
       " 35
       11 40 11
1.07 "
1.68 "
       " 50
0.21 " 45 "
                 11
1.34 " " 50 " " " to the Middleborough
```

line.

Thence northerly in Middleborough

```
0.24 miles at 50 miles per hour
0.36 " " 45 " " " " to the Bedford Street
```

Circle.

Beginning again in Bridgewater, north of Town, at the beginning of State Highway

Thence northerly

```
0.43 miles at 40 miles per hour
0.35 " " 45 " " "
0.29 " " 50 " " " to the East
```

Bridgewater line.

```
Thence northerly in East Bridgewater
                 0.20 miles at 50 miles per hour
                 0.48 " 40 "
                       " 45
                  0.87
                       n n 30 n 8
                 0.37
                       " 45
                                11
                 1.27
                                            to the Whitman line.
                      " " 50
                                     H
                                        #1
                               11
                  0.58
Thence northerly in Whitman
                  0.08 miles at 50 miles per hour
                  0.45 " " 45 "
                      " " 35 "
                  0.27
                       " 40
                                3.0
                  0.44
                 0.39 " " 35 "
                                    11
                  0.67 " " 45 "
                                            to the Abington
                                    11
```

line.

Thence northerly in Abington

				miles					
				.01					
1.09	11 =	11	45	11	11	11			
0.28	11	17	35	11	11	2.0			
1.08	H	11	45	11	13	11	to	the	Weymouth

line.

Thence northerly in Weymouth

	miles					hour				
	11					H =				
	11									
0.44	11	11	45	11	11	##				
0.69	11	EB	40	11	8.5	11	ending	at	the	

junction of Route 53; the total distance being, 27.36 miles.

Operation of a motor vehicle at a rate of speed in excess of these limits shall be prima facie evidence that such speed is greater than is reasonable and proper.

The provisions of this regulation shall not, however, abrogate in any sense, Section 14 of Chapter 90.

The Department of Public Works and the Registrar of Motor Vehicles, acting jointly do hereby certify in writing, that this regulation is consistent with the public interest.

Standard signs must be erected at the beginning of each zone.

DATE: December 26, 1972

FOR THE DEPARTMENT OF PUBLIC WORKS

RV -

Traffic Engineer

Registrar of Motor Verticles

### TOWN OF ABINGTON SPECIAL SPEED REGULATION NO. 568-A

Highway Location:

ABINGTON

Authority In Control:

TOWN OF ABINGTON

Name of Highway:

ROUTE 139

with the same of the In accordance with the provisions of Chapter 90, Section 18, of the General Laws (Ter. Ed.) as amended, the following Special Speed Regulation is

hereby Adopted

by the Board of Selectmen

of the Town of Abington

Special Speed Regulation number 568 dated October 9, 1970 is hereby amended by striking out the regulation in its entirety and inserting in place thereof the following revision and addenda.

That the following speed limits are established at which motor vehicles may be operated in the areas described:

## ROUTE 139 - EASTBOUND

Beginning at the Weymouth Town Line Thence easterly on Route 139
0.41 miles at 40 miles per hour

0.43 40 H. 11 11 n n 0.57 11 0.38 11 30 0.27 11 25

- 11 " 35 11 -11 - 11 0.30 ending at the Rockland Town Line; the total distance being 2.36 miles.

# ROUTE 139 - WESTBOUND

Beginning at the Rockland Town Line Thence westerly on Route 139

0.30 miles at 35 miles per hour 25 0.22 11 0.38 30 40 0.62 0.43 35

40 0.41 ending at the Weymouth Town Line; the total distance being 2.36 miles.

Operation of a motor vehicle at a rate of speed in excess of these limits shall be prima facie evidence that such speed is greater than is reasonable and proper.

The provisions of this regulation shall not, however, abrogate in any sense Chapter 90, Section 14, of the General Laws (Ter. Ed).

Attest Maddine E ahearn

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

SPECIAL SPEED REGULATION NO. 568-A

The Department of Public Works and the Registrar of Motor Vehicles, acting jointly, do hereby certify that this regulation is consistent with the public interests.

Standard signs must be erected at the beginning of each zone.

DATE: March 13, 1979

FOR THE DEPARTMENT OF PUBLIC WORKS

BY: Traffic Engineer

Chief Deputy Registrar